```
Minimum |
Maximum |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Searched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein -
                                                          SPTREMBL_16:*

Sp_archea:*

sp_archea:*

sp_bacterif

sp_fungi:*

sp_human:

sp_human:

sp_manm

refined sp_ore

sp_nhc:

sp_nhc:

sp_nhc:
sp_ph

10:
sp_n

11:
sp.

12:
sf

13:
sf
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                   DB DB
                                                                                                                                                                                                                                                                                                                                                                                                  seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                July 18, 2001, 15:57:52; Search time 31.07 Seconds (without alignments) 3253.332 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  425026 segs, 132305027 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   us-09-587-111-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MTSPSSSPVFRLETLDGGQE.....EDEDGASEENYVPVQLLQSN 764
                                                                                                                                               sp_organelle:*
sp_phage:*
                                                                                                                                                                                                                                                                sp_archea:*
sp_bacteria:*
                                                                                                                                                                                                                sp_invertebrate:*
                                                               sp_unclassified:*
sp_vertebrate:*
sp_virus:*
                                                                                                                  sp_rodent:*
                                                                                                                                sp_plant:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                   425026
```

8 8	GN C		DT	ΡŢ	AC	U	0975	RESULT																											
HO HO	VR X	9	22	01	စ္တ	00	S	ΙŢ		45	44	43	42	41	40	39	38	37	36	35	34	$\mathfrak{S}_{\mathfrak{S}}$	32	31	30	29	28	27	26	25	24	23	22	21	20
Homo sapiens (Human). Eukarvota: Metazoa: C	VRL-1.		01-NOV-1999	01-NOV-1999	Y5S1;	Q9Y5S1		-		224.5	226.5	229	233	255	261	338	364	392.5	414	428.5	440.5	469.5	579.5	584	586	589	607.5	630	631	634	933	969	1112.5	1442.5	1446.5
s (Humaı Metazoa	NECERTON DINE	(TrEMBLrel.		(TrEMBLrel		PRELIMINARY						5.7	5.8		6.5			9.8	10.3	10.7	11.0	11.7	14.5	14.6	14.6	14.7	15.2		15.8			•	٠	36.0	36.1
chor	-	-		•		INARY;				890						1123						769	729	723	730	723	727	725	725	725	471	511	528	778	873
data	Z	16,	12,	12,						11	σ	Ŋ	v	ഗ	u	ഗ	u	G	Ç,	ഗ	11	v	4	11	σ	11	11	4	4	4	11	4	11	11	11
Eukarvota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi	PROTEIN I.	Last annotation update)	Last sequence update)	Created)		PRT; 764 AA.			ALIGNMENTS	Q9QUQ9	P79100	Q9VMR4	Q9W0T5	Q9GRV5	Q22374	Q9W3W0	017469	P90784	061220	Q9VUD5	Q9JJJ0	Q9N3Y9	Q9NQA5	Q9JJL2	Q9XSM3	Q9JIP0	Q9R186	Q9H1D0	Q9H1D1	Q9H296	Q9JLM0	Q9H3O3	Q9Z182 ·	Q9JM56	Q9ERZ7
Euteleostomi;										Q9quq9 mus musculu	_		-	-			_		061220 caenorhabdi	Q9vud5 drosophila	Q9jjj0 mus musculu	Q9n3y9 caenorhabdi	Q9nga5 homo sapien			rattus	9	homo	Q9hld1 homo sapien	Q9h296 homo sapien	Q9jlm0 rattus norv	Q9h303 homo sapien	rattus	Q9jm56 rattus norv	

Qy	Qу	Qu Be	SQ	DR	DR	DR	DR S	ב ב	2 5	Z P	RT	RT	RA	RX	RP :	RN :	o i	88	3 8	G C	DE	Dī	Į,	Į,	Ā	U S	RESULT	
61 RKGTGASQPDPNRFDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCL 120 	1 MTSPSSSPVFRLETLDGGQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNLNY 60 	Query Match 100.0%; Score 4004; DB 4; Length 764; Best Local Similarity 100.0%; Pred. No. 0; Matches 764; Conservative 0; Mismatches 0; Indels 0; Gaps	Receptor. SEQUENCE 764 AA; 85980 MW; A73E3696E70F91E9 CRC64;	SMART; SM00248; ANK; 1.	PROSITE; PS50297; ANK_REP_REGION; 1.	PROSITE; PS50088; ANK_REPEAT; 1.		Interpro: IPRO02111: -	Interpro. TPRO0210: -	Nature 398:436-441(1999).	heat.";	h a high tl	Caterina M.J., Rosen T.A., Tominaga M., Brake A.J., Julius D.;		SEQUENCE FROM N.A.			Mammalia: Eutheria: Primates: Catarrhini: Hominidae: Homo.	Chardets: Crepiate: Vartabrets:	VRL-1.	VANILLOID RECEPTOR-LIKE PROTEIN 1.		(TrEMBLIE)	1999 (TrEMBLrel.		09Y5S1 PRELIMINARY; PRT; 764 AA.	IJT 1	

Result

Score

Length

DB

Description

SUMMARIES

Query

4004 39159 3011.5 3041.5 3028.5 1652 1652.1 1648.5 11648.5 11648.5 11648.5 1467.1 1467.5

100.0 78.9 76.2 76.0 76.0 77.0 41.3 41.3 41.2 41.2 41.2 41.1 36.6 36.6 36.6 36.6

09Y5S1 09WTR1 1 09WUD2 1 09WUD2 1 09WYB 1 09JM18 1 09JM18 1 09JM3 1 035433 1 035433 1 035433 1 039M57 09H80 09H0G9 09H0G9 09H0G9 09H0G9 09H0G9 09H0G9 09H0G9 09H0G9 09H0G9 09HBA0 09HBA0 09HBA0 09EPK8 1 09EPK8

O9y5s1 homo sapien
O9y670 homo sapien
O9y670 homo sapien
O9w171 mus musculu
O9wud2 rattus norv
O9jm18 rattus norv
O9jm18 rattus norv
O9jm34 homo sapien
O9h304 homo sapien
O9h039 homo sapien
O9h030 homo sapien
O9h030 homo sapien
O9erz8 rattus norv
O9hba0 homo sapien
O9erz8 rattus norv
O9hba0 homo sapien
O9erz8 mus musculu
O9epk8 mus musculu

0

13

0

```
RESULT OPYGFOR OF FOR ON OPYGFOR OPYGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                 Pfam; PF00023; ank; 3
PROSITE; PS50088; ANK,
PROSITE; PS50297; ANK,
SMART; SM00248; ANK;
                                                                                                                                                                                                                                                                                                                                                                      Q9Y670
Q9Y670;
Q1-NOV-1999
01-NOV-1999
01-MAR-2001
                                                                                                                              Submitted
EMBL; AF10
                                                                                                                                                                                                                                                             YRL.
Homo sapiens (Human).
Homo sapiens (Human).
'horia; Metazoa; Chordata; (horia; Primates;
                                                                                                                                                                                    SEQUENCE FROM N.A.
Garcia R.L., Delmas P.,
"Cloning and functional
                                                                      Submitted (NOV-1998) to the EMBL; AF103906; AAD41724.1; InterPro; IPR002111; -. InterPro; IPR002111; -. Pfam; PF00023; ank; 3.
   Receptor
                                                                                                                                                                                                                                                                                                                                                         VANILLOID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LCEDPSGAGVPRTLENPVLASPPKEDEDGASEENYVPVQLLQSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KLQKAISVLEMENGYWWCRKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTLPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KLQKAISVLEMENGYWWCRKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTLPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCKSPHRHRMVVLEPLNKLLQAKWDLLIPKFFLNFLCNLIYMFIFTAVAYHQPTLKKQAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCKSPHRHRMYVLEPLNKLLQAKWDLLIPKFFLNFLCNLIYMFIFTAVAYHQPTLKKQAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAKEGKIEIFRHILQREFSGLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAKEGKIEIFRHILQREFSGLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAF
E; PS50088; ANK_REPEAT; 1.
E; PS50297; ANK_REP_REGION; 1
                                                                                                                                                                                                                                                                                                                                                                        9 (TrEMBLrel.
9 (TrEMBLrel.
1 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                       . 12, Created)
. 12, Last sequence upo
. 16, Last annotation upo
E PROTEIN.
                                                                                                                                                                                    Cesare P., expression
                                                                                                                                               EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                        ب
                                                                                                                                                                                    England of VRL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                        on update)
                                                                                                                                                                                    S., Liapi A., Wood J.N.; a vanilloid receptor-like
                                                                                                                                                 databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
```

```
RESULT
O9WTR1
ID Q9
AC Q9
AC Q9
DT 0
DT 0
DT 0
DT 0
OC 1
OC 0
OX
                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                           QΥ
                                                                                                                              8
                                                                                                                                             밁
                                                                                                                                                                          멍
                                                                                                                                                                                       δÃ
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                               Вb
                                                                                                                                                                                                                                                                                                                           DЬ
                                                                                                                                                                                                                                                                                                                                         δõ
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           δõ
                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Mat
Best Loca
Matches
                     O9WTR1
O9WTR1;
O1-NOV-1999 (TrEMBLrel. 1
O1-NOV-1999 (TrEMBLrel. 1
O1-NAR-2001 (TrEMBLrel. 1
GROWTH FACTOR REGULATED C
VRL1 OR GRC.
Mus musculus (Mouse).
Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                721
                                                                                                                              721
                                                                                                                                             661
                                                                                                                                                            661
                                                                                                                                                                          601
                                                                                                                                                                                         601
                                                                                                                                                                                                       541
                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 98.1 pes 750; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Match
                                                                                          w
                                                                                                              LCEDPSGAGVPRTLENPYLASPPKEDEDGASEENYVPVQLLQSN 764
                                                                                                                                                                          MKAVLNLKDGVNACILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVK
                                                                                                                                                                                                                                                                                                                                                                                                                                              MTSPSSSPVFRLETLDGGQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNLNY
                                                                                                                                                     KLQKAISVLEMENGYWWCRKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTLPT
                                                                                                                                                                                                                                                                                                                                                                TDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKL
                                                                                                                                                                                                                                                                                                                                                                                             LLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQA
                                                                                                                                             KLQKAIXVLEMENGYWWCRKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTLPT
                                                                                                                                                                                                                                                                                                                                                        TDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKL
                                                                                                                                                                                                                                                                                                                                                                                     LLVENGANVHARACGRFFQNGQGTCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA;
         Rodentia;
               Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.5%;
98.2%;
                                      12, Created)
12, Last sequence update)
16, Last annotation updat
CALCIUM CHANNEL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ¥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
Pred.
                 Craniata; Vertebrata; Euteleostomi;
         Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AF9DE8F495EB43A0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3945;
No. 0;
                                                                            756
                                                                            ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
          Muridae;
                                              update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
          Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
          Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                            720
                                                                                                                                                                                         660
                                                                                                                                                                                                        600
                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                        300
```

```
δÕ
                               멍
                                               δõ
                                                                   В
                                                                                 Q
                                                                                                       B
                                                                                                                     Ş
                                                                                                                                         β Q
                                                                                                                                                                            멍
                                                                                                                                                                                           Qy
                                                                                                                                                                                                             В
                                                                                                                                                                                                                            δĀ
                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                 DЪ
                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                       Д
                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR002110; -.
InterPro; IPR002111; -.
Pfam; PF00023; ank; 3.
PROSITE; PS50088; ANK_REPEAT; 1.
PROSITE; PS50297; ANK_REP_REGION;
SMART; SM00248; ANK; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-C57 BLACK-6; TISSUE-SPLEEN;
Kanzaki M., Zhang Y., Kojima I.;
"Growth factor regulated calcium channel.";
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AB021665; BAA78478.1; -.
MGD; MGI:1341836; Vr11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               [1]
SEQUENCE
715
                 719
                                                                                                        537
                                                                                                                         540
                                                                                                                                           477
                                                                                                                                                           480
                                                                                                                                                                             417
                                                                                                                                                                                                                357
                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                  297
                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                     237
                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                           117
                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                             57
                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match
Local
                                                                   FHCKSPHRHRMVVLEPLNKLLQAKWDLLLIPKFFLNFLCNLIYMFIFTAVAYHQPTLKKQA
                                                                                                                                                                                                                                                MTSPSSSPVERLETLDGGQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNLNY
         PTLCEDPSGAGVPRTLENPVLASPPKEDEDGASEENYVPVQLLQSN
                              WKLQKAISVLEMENGYWWCRKKHRAGRLLKVGTKGDGIPDERWCFRVEEVNWAAWEKTL
                                          WKLQKAISVLEMENGYWWCRKKQ-RAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTL
                                                                                                                                                                                     APHLKAEVGNSMLLTGHILILLGGIYLLVGQLMYFWRRHVFIWISFIDSYFEILFLFQAL
                                                                                                                                                                                                                                                                                                                                                                                                     RKGTGASQPDPNRFDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCL
PTLSEDPSGAGITGYKKNPT---
                                                                                                                                                                            IPSSKATFGDSMLLLGHILILLGGIYLLLGQLWYFWRRRLFIWISFMDSYFEILFLVQAL
                                                                                                                                                                                                              FHCKSPHRHRMVVLEPLNKLLQEKWDRLIPRFFFNFACYLVYMIIFTIVAYHQPSLEQPA
                                                                                                                                                                                                                                                                                                                                                                                            RKGLGPSQQDPNRFDRDRLFSVVSRGVPEELTGLLEYLRRTSKYLTDSAYTEGSTGKTCL
                                                                                                                                                                                                                                                                                                                                                                                                                               MTSASNPPAFRLETSDGDEEGSAEVNKGK----NEPPPMESPFQGEDRNFSPQIKVNLNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  al Similarity
615; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SM00248; ANK;
CE 756 AA; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85964 MW; 4C037D0F6066EF4C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         78.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 3159; DB 11;
Pred. No. 7.2e-241;
5; Mismatches 84;
SKPGKNSASEEDHLPLQVLQSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                           180
                                                                    654
                                                                                     659
                                                                                                                                                                             476
                                                                                                                                                                                                                                                                                    296
                                                                                                                                                                                                                                                                                                                       236
                                                                                                                                                                                                                                                                                                                                                          176
                                                                                                                                                                                                                                                                                                                                                                                                                               56
                                                                                                        594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ū
```

```
δ
                                В
                                                 Qy
                                                                     B
                                                                                   Ωy
                                                                                                        DЬ
                                                                                                                         ρy
                                                                                                                                             В
                                                                                                                                                            δ
                                                                                                                                                                                 В
                                                                                                                                                                                              Qy
                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                        Дb
                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OSWID2

OSWID2;

f 01-NOV-1999 (TrEMBLrel. 12,
f 01-NOV-1999 (TrEMBLrel. 12,
f 01-MAR-2001 (TrEMBLrel. 16

"ANTLLOID RECEPTOR-LIKE PI
                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 598; Conserv
                                                                                                                                                                                                                                                                                                                                                                                             Nature 398:436-441(1999).
EMBL; AF129113; AAD26364.1; -.
InterPro; IPR002110; -.
InterPro; IPR002111; -.
Pfam; PF00023; ank; 3.
PROSITE; PS50088; ANK_REPEAT; 1.
PROSITE; PS5098; ANK_REP_REGION; 1
SMART; SM00248; ANK; 1.
                                                                                                                                                                                                                                                                                                                                                                              Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-SPRAGUE-DAWLEY;
MEDLINE-99215558; PubMed-10201375;
Caterina M.J., Rosen T.A., Tominaga M.,
"A capsaicin-receptor homologue with a !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10116;
                                                                     357
                                                                                                          297
                                                                                       355
                                                                                                                           296
                                                                                                                                             237
                                                                                                                                                               236
                                                                                                                                                                                 177
                                                                                                                                                                                                                                                        57
                                                                                                                                                                                                                                                                          61
                                LFQALLTVVSQVLCFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVMIQKVILRD
                                                                                                                                                      ASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDL
                                                                                                                                                                                                                                                                                       MTSASSPPAFRLETSDGDEEGNAEVNKGKQE----PPPMESPFQREDRNSSPQIKVNLNF
                                                                                                                                                                                                                                                                                                      MTSPSSSPVFRLETLDGGQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNLNY
LLQALLTVLSQVLRFMETEWYLPLLVLSLVLGWLNLLYYTRGFQHTGIYSVMIQKVILRD
                                                                                                                                             ASLEATDSLGNTVLHALVMIADNSPENSALVIHMYDGLLQMGARLCPTVQLEEISNHQGL
                                                                                                                                                                                                                                                                                                                                                                              761
                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                              ΑA;
                                                                                                                                                                                                                                                                                                                                                                              86689 MW;
                                                                                                                                                                                                                                                                                                                                         76.28;
77.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 12, Created
. 12, Last se
. 16, Last ar
E PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                 62;
                                                                                                                                                                                                                                                                                                                               Score 3051.5;
Pred. No. 2.2e
62; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleosto
Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                              46A281183EEB672F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence up
annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Brake A.J., Julius high threshold for r
                                                                                                                                                                                                                                                                                                                                         .2e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          on update)
                                                                                                                                                                                                                                                                                                                                                   DB 11;
                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 noxious
                                                                                                                                                                                                                                                                                                                                                   761;
                                                                                                                                                                                                                                                                                                                                 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus
                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                       414
                                                                                                                          354
                                 476
                                                                      416
                                                                                                          356
                                                                                                                                                               295
                                                                                                                                                                                                                     176
                                                                                                                                                                                                                                                                                             56
                                                                                                                                                                                                                                                                                                               60
                                                                                                                                             296
                                                                                                                                                                                 236
                                                                                                                                                                                                                                                                                                                                 7;
```

```
γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT PROPERTY OF THE PROPERT
                                           Q
                                                                                           В
                                                                                                                                                                                    밁
                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                         밁
    В
                                                                                                                                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAY-2000
01-MAY-2000
01-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS50088; ANK_REPEAT; 1.
PROSITE; PS50297; ANK_REP_REGION;
SMART; SMORQ248; ANK; 1.
SEQUENCE 761 AA; 86705 MW; 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Molecular cloning of a stretch activated channel from rat kidney."; Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AB029330; BAA88637.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  990хн8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR002110; -.
InterPro; IPR002111; -.
Pfam; PF00023; ank; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             д90хнв;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          shibashi K.;
    297
                                             296
                                                                                           237
                                                                                                                                         236
                                                                                                                                                                                       177
                                                                                                                                                                                                                                    176
                                                                                                                                                                                                                                                                                117
                                                                                                                                                                                                                                                                                                                             116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               537
                                                                                                                                                                                                                                                                                                                                                                           57
                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity les 597; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                υī
                                                                                                                                                                                                                                                                                                                                                                                                                                                           MTSPSSSPVFRLETLDGGQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNLNY
                     TPLKLAAKEGKIEIFRHILQREFSG-LSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSV
                                                                                                                 ASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDL
                                                                                                                                                                                                                                                                                                 GKTCLMKAVLNLKDGVNACILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WEQTLPTLCEDPSGAGVPRTLENPVLASPPKEDEDGASEENYVPVQLLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ASLEATDSLGNTVLHALLWIADNSPENSALVIHWYDGLLQMGARLCPTVQLEEISNHQGL
                                                                                                                                                                                                            LQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVSYLLENPHQP
                                                                                                                                                                                                                                                                           GKTCLMKAVLNLQDGVNACIMPLLQIDKDSGNPKLLVNAQCTDEFYQGHSALHIAIEKRS
                                                                                                                                                                                                                                                                                                                                                                      IKRPPKNTSAPSQQEPDRFDRDRLFSVVSRGVPEELTGLLEYLRWNSKYLTDSAYTEGST
TPLKLAAKEGKIEIFRHILQREFSGPYQPLSRKFTEWCYGPVRVSLYDLSSVDSWEKNSV
                                                                                                                                                                                  LQCVKLLVENGADVHLRACGRFFQKHQGTCFYFGELPLSLAACTKQWDVVTYLLENPHQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WEKTLPTLSEDPSGPGITGNKKNPT----SKPGKNSASEEDHLPLQVLQS
                                                                                                                                                                                                                                                                                                                                                                                               RKGTGA-SQPDPNRFDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGST 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TrEMBLrel. 13, Created)
(TrEMBLrel. 13, Last sequence up)
(TrEMBLrel. 16, Last annotation)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHANNEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76.0%;
77.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 3041.5;
Pred. No. 1.4e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8977CDE1D5351EC8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    on update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 11; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                             176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                           296
                                                                                                                                      295
                                                                                                                                                                                  236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7;
```

```
RESULT
OPENING
                                       Qy
                                                                                     DЪ
                                                                                                                            δÃ
                                                                                                                                                                       Вb
                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                        Submitted (JAN-1999) to the EMBL/GenBa EMBL; AB022332; BAA93435.1; -. InterPc; IPR002110; -. InterPc; IPR002111; -. Pfam; PF00023; ank; 3. Pfam; PF00023; ank; 3. PROSITE; PS50088; ANK, REPEAT; 1. PROSITE; PS50297; ANK, REP_REGION; 1. SMART; SM00248; ANK; 1. SMART; SM00248; ANK; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q9JMI8;
Q9JMI8;
01-OCT-2000
01-OCT-2000
01-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM TISSUE=KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ION CHANNEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Ion
  117
                                             116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          357
                                                                                       57
                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
MTSPSSSPVFRLETLDGGQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNLNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                channel.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WEQTLPTLCEDPSGAGVPRTLENPVLASPPKEDEDGASEENYVPVQLLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GKTCLMKAVLNLKDGVNACILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRS 175
                                                                                                                                                                            MTSASSPPAFRLETSDGDEEGNAEVNKGKQE----PPPMESPFQREDRNSSPQIKVNLNF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DSWSIWKLQKAISVLEMENGYWWC-RKKQRAGVMLTVGTKPDGSPDERWCERVEEVNWAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DASLELFKFTIGMGELAFQEQLRFRGVVLLLLLAYVLLTYVLLLNMLIALMSETVNHVAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EASLELFKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLLNMLIALMSETVNSVAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LEIIAFHCKSPHRHRMVVLEPLNKLLQAKWDLLIPKFFLNFLCNLIYMFIFTAVAYHQPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WEKTLPTLSEDPSGPGITGNKKNPT----SKPGKNSASEEDHLPLQVLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NSWSIWKLQKAISVLEMENGYWWCRRKKHREGRLLKVGTRGDGTPDERWCFRVEEVNWAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LEIIAFHCKSPNRHRMVVLEPLNKLLQEKWDRLVSRFFFNFACYLVYMFIFTVVAYHQPS
                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              z
                                                                                                                                                                                                                                                                                   75.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15,
16,
                                                                                                                                                                                                                                                                   62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
Last sequence u
Last annotation
                                                                                                                                                                                                                                                                                        Score 3028.
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                               CE0970BC4195351E
                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                      .5; DB 11;
1.5e-230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    update)
                                                                                                                                                                                                                                                                   94;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            databases
                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rattus
                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                     60
                                                                                                                                                                            56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       534
                                                                                                                                                                                                                                                                   7;
```

Вþ

۴.

```
RESULT
035433
                                                                          ID ACCOCCE TO ACCOCCE TO ACCOCCE TO ACCOCCE TO ACCOCCE TO ACCOCCE ACCO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ρ
 Query
Best I
                                                                                                                                                                                                                                                                                                                                                                                                                                     O35433 PRELIMINARY;
O35433;
O1-JAN-1998 (TrembLrel. 05, C
O1-JAN-1998 (TrembLrel. 16, L
O1-MAR-2001 (TrembLrel. 16, L
VANILLOID RECEPTOR SUBTYPE 1.
                                                                                                                                                                                                                                                                           Caterina
Julius D.
                                                                        Pfam; PF00023; ank; 3.
PROSITE; PS50288; ANK REPEAT; 1.
PROSITE; PS50297; ANK_REP_REGION;
SMART; SM00248; ANK; 1.
SEQUENCE 838 AA; 94947 MW; DAI
                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                              "The
                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE-98007969; Caterina M.J., Sch
                                                                                                                                                                                                     Nature 389:816-824(1997).
EMBL; AF029310; AAC53398.1;
                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus (Rat).
                                                                                                                                                               InterPro; IPR002110;
InterPro; IPR002111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  415
y Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            capsaicin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WEQTLPTLCEDPSGAGVPRTLENPVLASPPKEDEDGASEENYVPVQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LEIIAFHCKSPHRHRMVVLEPLNKLLQAKWDLLIPKFFLNFLCNLIYMFIFTAVAYHQPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TPLKLAAKEGKIEIFRHILQREFSG-LSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WEKTLPTLSEDPSGPGITGNKKNPT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DASLELFKFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EASLELFKFTIGMGELAFQEQLHFRGMYLLLLLAYVLLTYILLLNMLIALMSETVNSVAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TPLKLAAKEGKIEIFRHILQREFSGPYQPLSRKFTEWCYGPVRVSLYDLSSVDSWEKNSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LDQPAIPSSKATFGESMLLLGHILILLGGIYLLLGQLWYFWRRRLFIWISFMDSYFEILF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LEI IAFHCKSPNRHRMVVLEPLNKLLQEKWDRLVSRFFFNFACYLVYMFIFTVVAYHQPS
 Similarity
                                                                                                                                                                                                                                                        receptor:
                                                                                                                                                                                                                                                                                            Schumacher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PubMed=9349813;
humacher M.A., T
                                                                                                                                                                                                                                                                                                                                                                                   Chordata;
Rodentia;
 41
46
 ين ين
                                                                                                                                                                                                                                                          b
                                                                                                                                                                                                                                                          heat-activated
                                                                                                                                                                                                                                                                                                                                                                                                                                           ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        , Created)
, Last sequ
, Last anno
 Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                        DAFC80B12BDF71BF
                                                                                                                                                                                                                                                                                            Tominaga M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence update)
annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -SKPGKNSASEEDHLPLQV
1652; DB 1
No. 8e-122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ą
                                                                                                                                                                                                                                                          ion
                 11;
                                                                                                                                                                                                                                                                                            Rosen
                                                                                                                                                                                                                                                          channel
                                                                        CRC64;
                  Length
                                                                                                                                                                                                                                                                                          T.A.,
                                                                                                                                                                                                                                                                                                                                                                                   Euteleostomi;
; Murinae; Rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               760
                                                                                                                                                                                                                                                          Ħ
                  838;
                                                                                                                                                                                                                                                          the
                                                                                                                                                                                                                                                                                            Levine
                                                                                                                                                                                                                                                        pain
                                                                                                                                                                                                                                                                                                                                                                                     Rattus
                                                                                                                                                                                                                                                                                            J.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         236
```

```
REPARATE STATES
                                                                                                                                                                        δõ
                                                                                                                                                                                             В
                                                                                                                                                                                                          Š
                                                                                                                                                                                                                            ф
                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                          рь
                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                          뫄
                                                                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                       δõ
                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                Eukaryota; Metazoa; Chorda
Mammalia; Eutheria; Rodent
NCBI_TaxID-10116;
                                                                              Q9JM57 PRELIMINARY;
Q9JM57;
01-OCT-2000 (TrEMBLrel. 1
01-OCT-2000 (TrEMBLrel. 1
01-MAR-2001 (TrEMBLrel. 1
VANILLOID RECEPTOR TYPE 1
SEQUENCE FROM N.A.
Tsutsumi S., Nakamura
"Vanilloid receptor t
Submitted (MAR-2000)
                                                                        VR1L1.
                                                                                                                                                              746
                                                                                                                                                                                              686
                                                                                                                                                                                                             649
                                                                                                                                                                                                                             626
                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                            577
                                                                                                                                                                                                                                                                           535
                                                                                                                                                                                                                                                                                           517
                                                                                                                                                                                                                                                                                                           475
                                                                                                                                                                                                                                                                                                                          458
                                                                                                                                                                                                                                                                                                                                           417
                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                          359
                                                                                                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100
                                                                                                                                                                             708
                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18
                                                                                                                                      8
                                                                                                                                                                                            LFQALLTVVSQVLCFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVMIQKVILRD
                                                                                                                                                                                                                                                                                                                                                                                        EVNWTTWNTNVGIINEDPGNCEGVKRTLSFSLRSG----RVSGRNWKNFALVPLLR
                                                                                                                                                                      EVNWASWEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ
                                                                                                                                                                                                                                                                   LLRFLLIYLVFLFGFAVALVSLSQEAWRPEAPTGPNATESVQPMEGQEDEGNGA------
                                                                                                                                                                                                                                                                                          LVENGANVHARACGREFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DSVSAGEKPPRLYDRRSIFDAVAQSNCQELESLLPFLQRSKKRLTDSEFKDPETGKTCLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ----ASQPDPNRFDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GKGDSEEAS-----PLDCPYEEGGLASCPIITVSSVLTIQRPGDGPASVRPSSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVN---LNYRKGTG---
                                                                                                                                                                                                                                                            LCRFMFVYLVFLFGFSTAVVTLIED-----
                                                                                                                                                                                                                                                                                                                          -EGLPPYKLKNTVGDYFRVTGEILSVSGGVYFFFRGIQYFLQRRPSLKSLFVDSYSEILF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      359;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
               Nakamura
                                               Chordata;
Rodentia;
type
to t
              Α.,
                                                                              . 15, Created)
. 15, Last sequence upo
. 16, Last annotation u
E 1 LIKE PROTEIN 1.
the
       , Kohama
1 like p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      127;
like protein 1.";
EMBL/GenBank/DDBJ
                                              Craniata; Vertebrata; I
Sciurognathi; Muridae;
                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                ×:
                                                                                                                       838
                                                                                                                                                                                                                                                            -GKN----NSLPMESTPHKCRGSACKPGN
                                                                                                                      Ş
                                                                                               update)
                                                                                      update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      230;
 databases
                                                       Euteleostomi;
                                               Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;09
                                                Rattus.
                                                                                                                                                               797
                                                                                                                                                                              762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       159
                                                                                                                                                                                                                                                                                           576
                                                                                                                                                                                                                                                                                                          534
                                                                                                                                                                                                                                                                                                                          516
                                                                                                                                                                                                                                                                                                                                           474
                                                                                                                                                                                                                                                                                                                                                          457
                                                                                                                                                                                                                                                                                                                                                                                         399
                                                                                                                                                                                                                                                                                                                                                                                                         358
                                                                                                                                                                                                                                                                                                                                                                                                                         339
                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                        279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        219
                                                                                                                                                                                                                             . 685
                                                                                                                                                                                                                                                                           588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15;
```

```
RESULT
Q9H3O4
    DAC
DAT
                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ρy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
Q9H3O4;
Q9H3O4;
O1-MAR-2OO1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PFAMM, PF00023; ank; 3.
PROSITE; PS50207; ANK_REPEAT; 1.
PROSITE; PS50297; ANK_REP_REGION;
SMART; SM00248; ANK; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR002110;
InterPro; IPR002111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AB040873; BAA94307.1;
                                                                                                                                                        746
                                                                                                                                                                                                 708
                                                                                                                                                                                                                                               989
                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                                                                                                                                                                                        577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                        9
                                                                                                                                                                                                                                                                                                                            AF-HCKSPHRHRMVVLEPLNKLLQAKWDLLIPK-FFLNFLCNLIYMFIFTAVAYHQPTLK 416 |: ::|:|| |::| |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| | |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |::| |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EVNWTTWNTNVGIINEDPGNCEGVKRTLSFSLRSG----RVSGRNWKNFALVPLLR
                                                                                                                                                                             EVNWASWEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ
                                                                                                                                                                                                                                                                 VNSVATDSWSIWKLQKAISVLEMENGYWWC-RKKQRAGVMLTVGTKPDGSPDERWCFRVE
                                                                                                                                                                                                                                                                                                                                                                                                                                               LLRFLLIXLVFLFGFAVALVSLSQEAWRPEAPTGPNATESVQPMEGQEDEGNGA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -EGLPPYKLKNTVGDYFRVTGEILSVSGGVYFFFRGIQYFLQRRPSLKSLFVDSYSEILF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVENGANVHARACGRFFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQA
                                                                                                                                                                                                                                          VNKIAQESKNIWKLQRAITILDTEKSFLKCMRKAFRSGKLLQVGFTPDGKDDYRWCFRVD
                                                                                                                                                                                                                                                                                                                                                                                                                   LCREMEVYLVFLFGFSTAVVTLIED-----GKN---NSLPMESTPHKCRGSACKPGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KQAAP--HLKAEVGNSMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFIDSYFEILF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LVENGADVQAAANGDFFKKTKGRPGFYFGELPLSLAACTNQLAIVKFLLQNSWQPADISA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DSVSAGEKPPRLYDRRSIFDAVAQSNCQELESLLPFLQRSKKRLTDSEFKDPETGKTCLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----ASQPDPNRFDRDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLM 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GQEDGSEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVN---LNYRKGTG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 838 AA;
  (TrEMBLrel.
                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative 127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94964 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----PLDCPYEEGGLASCPIITVSSVLTIQRPGDGPASVRQSSQ
16,
  Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1652; DB 11;
Pred. No. 8e-122;
27; Mismatches 230;
                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EE33CE4A606C3404 CRC64;
                                             ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               838;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60;
                                                                                                                                                                                                 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                      707
                                                                                                                                                                                                                                                                                                                                 685
                                                                                                                                                                                                                                                                                                                                                                          648
                                                                                                                                                                                                                                                                                                                                                                                                                     625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                              588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15;
```

```
Ωy
                                                               ρ
                                                                                                           Ş
                                           밁
                                                                                       밁
                                                                                                                                   밁
                                                                                                                                                       δõ
                                                                                                                                                                              Ър
                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                         Вb
                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 344; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

CORTERIST D.N., Peck A., Zou T.;

CORTINIST and characterization of the human capsaicin receptor,

Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases.

EMBL, AF196175; AAG43466.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAPSAICIN RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2001 (TrEMBLrel. 01-MAR-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9606;
753
                     714
                                            693
                                                                 655
                                                                                       633
                                                                                                              595
                                                                                                                                    590
                                                                                                                                                        548
                                                                                                                                                                              530
                                                                                                                                                                                                    488
                                                                                                                                                                                                                           470
                                                                                                                                                                                                                                                 428
                                                                                                                                                                                                                                                                     413
                                                                                                                                                                                                                                                                                           370
                                                                                                                                                                                                                                                                                                                 353
                                                                                                                                                                                                                                                                                                                                      313
                                                                                                                                                                                                                                                                                                                                                             293
                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                       233
                                                                                                                                                                                                                                                                                                                                                                                                                             194
                                                                                                                                                                                                                                                                                                                                                                                                                                                   173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EASLELFKFTIGMGELAFQEQLHFRGMYLLLLLAYVLLTYILLLNMLIALMSETVNSVAT
                                                                                                                                                                                                                                                                    CGRFFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARA 193
                                                       DSWSIWKLQKAISVLEMENGYWWC-RKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWAS
                                                                                                                                GFAVALVSLSQEA-------WRPEAPTGPNATESVQPMEGQEDEGNGAQYRGIL
                                                                                                                                                                                         GNSMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFIDSYFEILFLFQALLITVVSQVL
                                                                                                                                                                                                                                                                                                                ILQREFS--GLSHLSRKFTEWCYGPVRVSLYDLASVDSCEENSVLEIIAF-HCKSPHRHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIPLLLEIARQTDSLKELVNASYTDSYYKGQTALHIAIERRNMALVTLLVENGADVQAAA
WNTNVGIINEDPGNCEGVKRTLSFSLRSS----RVSGRHWKNFALVPLLR
                   WEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ
                                                                                                                                                                             YFSHLKEYVASMVFSLALGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYIVFLF
                                                                                                                                                                                                                           GDYFRYTGEILSVLGGVYFFFRGIQYFLQRRPSMKTLFVDSYSEMLFFLQSLFMLATVVL
                                           ESKNIWKLQRAITILDTEKSFLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTT
                                                                                                                                                                                                                                                                                                                                                                                                       HGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLLQNSWQTADISARDSVGNTVLHAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                839 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative 122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94968 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41.2%; Score 1651.5; DB 4; 48.5%; Pred. No. 8.8e-122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16,
16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EA9BF7D6023EF9F4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
  798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VR1.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                      469
                                                                                       692
                                                                                                              654
                                                                                                                                    632
                                                                                                                                                        594
                                                                                                                                                                                                    547
                                                                                                                                                                                                                                                487
                                                                                                                                                                                                                                                                                                                                       369
                                                                                                                                                                                                                                                                                                                                                             352
                                            752
                                                                713
                                                                                                                                                                                                                                                                                            427
                                                                                                                                                                                                                                                                                                                 412
                                                                                                                                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                                                                                                                                                                                                                                                   232
                                                                                                                                                                               589
                                                                                                                                                                                                                                                                                                                                                                                                        292
                                                                                                                                                                                                                                                                                                                                                                                                                             252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11;
```

RESULT Q9H0G9 ID Q9H

10

Q9H0G9

PRELIMINARY;

PRT;

839 AA

```
뭐
                                Q
                                                                                      망
                                                                                                                                γ
                                                                                                                                                                                   밁
                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                 Q
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AC PROPERTY OF THE PROPERTY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ottenwaelder B., Obermaier B., Mewes H.W., Gasse Submitted (JAN-2000) to the EMBL/GenBank/DDBJ da EMBL; AL136801; CAB66735.1; -. Hypothetical protein.
SEQUENCE 839 AA; 94950 MW; EA9BF7D603AE4760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9H0G9;
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation updat
HYPOTHETICAL 94.9 KDA PROTEIN.
DKFZP434K0220.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (Human).
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. TISSUE-TESTIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    370
                                         714
                                                                                                                                                                                                                                                                                 590
                                                                                                                                                                                                                                                                                                                                                                                                                         488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
les 344; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match
WNTNVGIINEDPGNCEGVKRTLSFSLRSS---
                             WEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ
                                                                                      EASLELFKFTIGMGELAFQEQLHFRGMYLLLLLAYVLLTYILLLNMLIALMSETVNSVAT
                                                                                                                                                                                                                                                                                                               GFAVALVSLSQEA-------WRPEAPTGPNATESVQPMEGQEDEGNGAQYRGIL
                                                                                                                                                                                                                                                                                                                                                                                                  GNSMLLTGHILLILGGIYLLVGQLWYFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MLLVEPLNRLLQDKWDRFVKRIFYFNFLVYCLYMIIFTMAAYYRPV---DGLPPFKMEKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MVVLEPLNKLLQAKWDLLIPK-FFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKAE-V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGVLAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARA 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FDRDRLENAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLMKAVLNLKDGVNA 133
                                                                                                                                                                                                                                                                               GFSTAVVTLIEDGKNDSLPSESTSHRWRGPACRPPDSS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GDYFRVTGEILSVLGGVYFFFRGIQYFLQRRPSMKTLFVDSYSEMLFFLQSLFMLATVVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YDRRSIFEAVAQNNCQDLESLLLFLQKSKKHLTDNEFKDPETGKTCLLKAMLNLHDGQNT
                                                                                                                                                                                                                                                                                                                                                                          YFSHLKEYVASMVFSLALGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYIVFLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative 122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B., Mewes H.W., Gassenhuber
e EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1648.5;
Pred. No. 1.5e
22; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5; DB 4;
..5e-121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J.
                                       762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wiemann
                                                                                                                                                                                                                                                                            YNSLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                     713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
```

```
밁
                                              В
                                                                   QΥ
                                                                                            밁
                                                                                                                Qy
                                                                                                                                         밁
                                                                                                                                                              Qy
                                                                                                                                                                                        Вb
                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EQUENCE FROM N.A.

A Hayes P., Meadows H.J., Harries M.H., Duckworth M.D., Cairns W.,
A Harrison D.C., Clarke C., Gunthorpe M., Ellington K., Prinjha R.K.
Barton A.J., Medhurst A.D., Smith G.D., Topp S., Murdock P.,
A Sanger G.J., Terrett J., Jenkins O., Randall A., Benham C.D.,
A Gloger I.S., Davis J.B.;
T'Cloning and functional expression of a human orthologue of rat
vanilloid receptor-1.";
Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
R EMBL; AJ277028; CAB95729.1; -.
RR InterPro; IPR002110; -.
RR InterPro; IPR002111; -.
RR InterPro; IPR002111; -.
RR InterPro; IPR002111; -.
                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q9NQ74
Q9NQ74;
01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                          Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2000 (TrEMBLrel.
01-OCT-2000 (TrEMBLrel.
01-MAR-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00023; ank; 3.
PROSITE; PS50088; ANK_REPEAT; 1.
PROSITE; PS50297; ANK_REP_REGION;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kelsell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VANILLOID RECEPTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                               470
                                                                     428
                                                                                            413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM (elsell R.E.;
                        488
                                                                                                                                         353
                                                                                                                                                                                                                                                                                                                                  113
                                                                                                                                                                                        293
                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                            194
                                                                                                                                                                                                                                                                                     173
                                                                                                                                                                                                                                                                                                          134
                                                                                                                                                                                                                                                                                                                                             11
                                                                                                                                                                                                                                                                                 GNSMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVL
                                                                                                        MVVLEPLNKLLQAKWDLLIPK-FFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKAE-V
                                                                                                                                         GDYFRVTGEILSVLGGVYFFFRGIQYFLQRRPSMKTLFVDSYSEMLFFLQSLFMLATVVL
                                                                                            MLLVEPLNRLLQDKWDRFVKRIFYFNFLVYCLYMIIFTMAAYYRPV---DGLPPFKMEKT
                                                                                                                                                                                        VEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGVLAY
                                                                                                                                                                                                    VMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRH
                                                                                                                                                                                                                                     HGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLLQNSWQTADISARDSVGNTVLHAL
                                                                                                                                                                                                                                                            CGRFFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHAL
                                                                                                                                                                                                                                                                                                                                 YDRRSIFEAVAQNNCQDLESLLLFLQKSKKHLTDNEFKDPETGKTCLLKAMLNLHDGQNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (APR-2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ,s (Human).
Metazoa; Chordata; C
™..+heria; Primates; (
                                                                                                                                                                                                                                                                                                                                                                                                                                         839 AA; 94923 MW;
                                                                                                                                                                                                                                                                                                                                                                              41.1%; Score 1644.5; DB 4 ilarity 48.5%; Pred. No. 3.1e-121; Conservative 121; Mismatches 200;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15,
16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Created)
Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; V
Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                          7142FFAE43189ECC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    databases
                                                                                                                                                                                                                                                                                                                                                                                                       4:
                                                                                                                                                                                                                                                                                                                                                                                                                                          CRC64;
                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R.K.,
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                       547
                                              529
                                                                     487
                                                                                             469
                                                                                                                                         412
                                                                                                                                                                369
                                                                                                                                                                                                                                      292
                                                                                                                                                                                                                                                                                                                                  172
                                                                                                                                                                                                                                                                                                                                                                                11;
```

```
Ş
                                                                         Вþ
                                                                                                             Qy
                                                                                                                                                                밁
                                                                                                                                                                                                          QY
                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9NYULT
Q9D
AC Q9D
DT 011
DT 011
DT 011
DT 011
DT 01
DT 01
RR RN VRR
RR VRR
RR AMC
RA MC
R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
TISSUE-DORSAL ROOT GANGLION;
MCIntyre P., Winter J., Phillips
Meerasekera N., Rang H., Savidge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q9NY22;
01-OCT-2000 (TrEMBLrel.
01-OCT-2000 (TrEMBLrel.
01-MAR-2001 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00023; ank; 3.
PROSITE; PS50088; ANK_REPEAT; 1.
PROSITE; PS50297; ANK_REP_REGION; 1.
SMART; SM00248; ANK; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases EMBL; AJ272063; CAB89866.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VANILLOID RECEPTOR 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9NY22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR002110; ...
InterPro; IPR002111; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       McLatchie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (Human).
                               313
                                                                           293
                                                                                                                       253
                                                                                                                                                                     233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pharmacological comparison
                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                  173
                                                                                                                                                                                                                                                                                                             134
                                                                                                                                                                                                                                                                                                                                                            113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  595
                                                                                                                                                                                                                                                                                                                                                                               74 FDRDRLENAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLMKAVLNLKDGVNA 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12
                                                                                                                                                                                           CGRFFQKGQG-TCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHAL 252
                                                                                                                                                                                                                                                                                   CILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARA 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EASLELFKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLLNMLIALMSETVNSVAT 654
    TIPLLLEIARQTDSLKELVNASYTDSYYKGQTALHIAIERRNMALVTLLVENGADVQAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WEQTLPTLCEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GFSTAVVTLIEDGKNDSLPSESTSHRWRGPACRPPDSS----
                                                                         VEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGMMPLALAAGTGKIGVLAY
                                                                                              VMISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRH
                                                                                                                                                              HGDFFKKTKGRPGFYFGELPLSLAACTNQLGIVKFLLQNSWQTADISARDSVGNTVLHAL
                                                                                                                                                                                                                                                                                                                                                         YDRRSIFEAVAQNNCQDLESLLLFLQKSKKHLTDNEFKDPETGKTCLLKAMLNLHDGQNT 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WNTNVGIINEDPGNCEGVKRTLSFSLRSS----RVSGRHWKNFALVPLLR 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ESKNIWKLQRAITILDTEKSFLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DSWSIWKLQKAISVLEMENGYWWC-RKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GFAVALVSLSQEA----
                                                                                                                                                                                                                                                                                                                                                                                                                                                      342;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   839 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94939 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15,
16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----WRPEAPTGPNATESVQPMEGQEDEGNGAQYRGIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1636.5; DB 4
Pred. No. 1.3e-120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CC0D93A3AAD725F8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J.,
= ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        webb M., Ch
Clarke M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VR1 expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chambers
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  839;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bevan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -YNSLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŝ
                                                                         352
                          369
                                                                                                                  312
                                                                                                                                                                   292
                                                                                                                                                                                                                                                               232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         594
                                                                                                                                                                                                                                                                                                                                                                                                                                                   11;
```

```
JODES 3 JODES 
                        Ş
                                                                               Вb
                                                                                                                        Ωy
                                                                                                                                                                                  DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DЬ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O9DES3 PRELIMINARY; PKI; Q9DES3;
O1-MAR-2001 (TrEMBLrel. 16, Created)
O1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
O1-MAR-2001 (TrEMBLrel. 16, Last annotation update)
VANILLOID RECEPTOR-RELATED OSMOTICALLY ACTIVATED CHANNEL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                            Receptor.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Liedtke W., Choe Y., Marti-Renom M.A., B. Hudspeth A.J., Friedman J.M., Heller S.; "Vanilloid Receptor-Related Osmotically Candidate Vertebrate Osmoreceptor."; Cell 103:525-535(2000).

EMBL; AF261883; AAG28026.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PubMed=11081638;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=COCHLEA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 353
                           96
                                                                               97
                                                                                                                                 59
                                                                                                                                                                                  37
                                                                                                                                                                                                                                      23
                                                                                                                                                                                                                                                                                             Local Similarity
nes 338; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WEQTIPTICEDPSGA-GVPRTLENPVLASPPKEDEDGASEENYVPVQLLQ 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTYRQHPSENKRWRRRVVEKPVAGTKGPAPNPPPVLKVFNRPILFDIVSRGSPDGLEGLL
                                                                                                                                   -NYRK----
                                                                                                                                                                                                                                      SEADRGKLDFGSGLPPMESQFQGEDRKFAPQIRVNL-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WNTNVGIINEDPGNCEGVKRTLSFSLRSS----RVSGRHWKNFALVPLLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CFLAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVMIQKVILRDLLRFLLIYLVFLF 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GDYFRVTGEILSVLGGVYFFFRGIQYFLQKRPSMKTLFVDSYSEMLFFLQSLFMLATVVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GNSMLLTGHILLLGGIYLLVGQLMYFWRRHVFIWISFIDSYFEILFLFQALLTTVVSQVL 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MVVLEDLNKLLQAKWDLLIPK-FFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKAE-V 427
                                                                                                                                                                                     AEPSRGPPGAGDGKQNLRMKFHGAFRKGPPKPMELLESTIYESSVVPAPKKAPMDSLFDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GFSTAVVTLIEDGKNDSLPSESTSHRWRGPACRPPDSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GFAVALVSLSQEA------WRPEAPTGPNATESVQPMEGQEDEGNGAQYRGIL 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YFSHLKEYVASMVFSLALGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYIVFLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MLLVEPLNRLLQDKWDRFVKRIFYFNFLVYCLYMIIFTMAAYYRPV---DGLPPFKMEKT 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ILQREIQEPECRHLSRKFTEWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHD
                                                                                                                                                                                                                                                                                                                                                                                                                            852 AA;
                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                   36.68;
                                                                                                                                                                                                                                                                                                                                                                                                                            96197 MW;
                                                                                                                                                                                                                                                                                           121;
                                                                                                                                 -GTGASQPDP----NRFDRDRLFNAVSRGVPEDLAGLP
                                                                                                                                                                                                                                                                                           Score 1467; DB 13;
Pred. No. 3.3e-107;
21; Mismatches 245;
                                                                                                                                                                                                                                                                                                                                                                                                                              E85365D3FADD08C1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bell A.M., Denis C.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Activated
                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Channel
                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                             106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (VR-OAC),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sali
                                                                                                                                                                                                                                                                                           Gaps
                                                                               156
                                                                                                                                   95
                                                                                                                                                                                     96
                                                                                                                                                                                                                                         58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529
                                                                                                                                                                                                                                                                                                14;
```

١

```
밁
                                                                                                                                                                                                                                                                                        Qy
                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                              γQ
                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                 δÕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
 Query
Best [
                                                                                                                                                                                              01-MAR-
                                     extracellular osmolarity.";
Nat. Cell Biol. 2:695-702(2000).
EMBL; AP258465; AAGL6127.1; -.
SEQUENCE 871 AA; 98294 MW; C
                                                                                                                                             Homo sapiens (Human).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                    Strotmann
                                                                                               PubMed-11025659;
                                                                                                                   SEQUENCE
                                                                                                                                                                                    01-MAR-2001
                                                                                                                                                                                                                           оэнвсо
                                                                             "OTRPC4,
                                                                                                                                     NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                   679
                                                                                                                                                                                                                                                                                                                                                        679
                                                                                                                                                                                                                                                                                                                                                                          620
                                                                                                                                                                                                                                                                                                                                                                                              635
                                                                                                                                                                                                                                                                                                                                                                                                                                     575
                                                                                                                                                                                                                                                                                                                                                                                                                                                        510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               337
                                                                                                                                                                                               1-MAR-2001
1-MAR-2001
                                                                                                                                                                                                                                                                            799
                                                                                                                                                                                                                                                                                              730
                                                                                                                                                                                                                                                                                                                  739
                                                                                                                                                                                                                                                                                                                                                                                                                 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               156
 y Match
Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217
                                                                                                       EQUENCE FROM N.A. ISSUE-RENAL CORTEX;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   157
                                                                                                                                                                                                                                                                                                                                                                                                                                 TVGRLRRDRWSTVVPRVVE--LNKSCPTED
                                                                                                                                                                                                                                                                                                                          RKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTLPTLCEDPSGAG----
                                                                                                                                                                                                                                                                                                                                                     GVFIILLVTYIILTEVLLLNMLIALMGETVGQVSKESKHIWKLQWATTILDIERSEPLFL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IKDLEMKKCPGVNSEFIDGSFQLLYFIYSVLVIVTAGLYLGGVEAYLAVMVFALVLGWMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GMVLLLLLAYVLLTYILLLNMLIALMSETVNSVATDSWSIWKLQKAISVLEMENGY-WWC
                                                                                                                                                                                                                                                                                                                                                                                              HSNCTLPTYPSCRDS--
                                                                                                                                                                                                                                                                                                                                                                                                       FFLNFLCNLIYMFIFTAVAYHQPTLKKQAAPHLKAEVGNSMLLTGHILILLGGIYLLVGQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YGPYYSSLYDLSSLDTCGEEVSVLEILYYNSKIENRHEMLAVEPINELLRDKWRKFGAVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YGPVRVSLYDLASVDSC-EENSVLEIIAFHCKSPHRHRMVVLEPLNKLLQAKWDLL-IPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAACTKOWDVVSYLLENPHQPASLQATDSQGNTVLHALVMISDNSAENIALVTSMYDGLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTDDYYRGHSALHIAIEKRSLQCVKLLVENGANVHARACGRFFQ-KGQGTCFYFGELPLS
                                                                                                                                                                                                                                                                                                                RRAFRSGEMVTVGKGTDGTPDRRWCFRVDEVNWSHWNQNLGIISEDPGKSDTYQYYGFSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LW-YFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVLCFLAIEWYLPLLVSALVLGWLN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FYISVVSYLCAMIIFTLIAYYRP--MEGPPPYPYTTTIDYLRLAGEIITLLTGILFFFSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FRDVYYRGQTALHIAIERRCKHYVELLVEKGADVHAQARGRFFQPKDEGGYFYFGELPLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SFLLTHKKRLTDEEFREPSTGKTCLPKALLNLSAGRNDTIPILLDIAEKTGNMREFINSP
Similarity
                                                                           n R., Harteneck C., Nun
a nonselective cation
                                                                                                                                                                                   1 (TrEMBLrel.
1 (TrEMBLrel.
1 (TrEMBLrel.
                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                            - VPRTLENPVLASPPKED
36
43
 . 18;
                                                                                                                                                                                    16,
16,
                                                                                                                                                                                   Last
Last
                                                                           Nunnenmacher K., Schultz G., ion channel that confers sensi
                                                                                                                                                                                                        Created)
Score
Pred.
                                                                                                                                             Craniata; Vertebrata; Catarrhini; Hominidae,
                                                                                                                                                                                                                           PRT;
                                       C62056B86DEA6FB6
                                                                                                                                                                                   sequence update)
annotation update)
1467;
No. 3.
                                                                                                                                                                                                                                                                            826
                                                                                                                                                                                                                                                                                            746
                                                                                                                                                                                                                                                                                                                                                                                             -QTFSTFLLDLFKLTIGMGDLEMLESAKYP
DB 4;
.4e-107
                                                                                                                                                                                                                          ₹
                                                                                                                                              Hominidae;
        Length
                                                                                                                                                        Euteleostomi;
                                                                           sensitivity
                                                                                                                                               Homo
          871;
                                                                                    Plant
                                                                                      ч
                                                                             6
                                                                                                                                                                                                                                                                                                                                                                         678
                                                                                                                                                                                                                                                                                                                                                                                                                619
                                                                                                                                                                                                                                                                                                                                                                                                                                    634
                                                                                                                                                                                                                                                                                                                                                                                                                                                      559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       274
                                                                                                                                                                                                                                                                                                                                   729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          276
```

```
RESULT
Q9ERZ8
ID
Q9ERZ8
ID
Q0
AC
Q0
DT
00

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                      Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                             д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                       뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                     Q9ERZ8;
Q9ERZ8;
01-MAR-2001
01-MAR-2001
01-MAR-2001
VANILLOID RE
Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10116;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                             733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151
                                                                                                                                                                                                                                                                                                                                                                                                               719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            136
                                                                                                                                                                                                                                                                                                                                                                       793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53
                                                                                                                                                                                                                                                                                                  15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LFKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLLNMLIALMSETVNSVATDSWSI
||| |||||:|
LFKLTIGMGDLEMLSSTKYPVFIILLVTYIILTFVLLLNMLIALMGETVGQVSKESKHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GIINEDP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RREVTDEDTRHLSRKFKDWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKIENRHEML
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WKLQWATTILDIERSEPVFLRKAERSGEMVTVGKSSDGTPDRRWCFRVDEVNWSHWNQNL 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVALVSL------SQEAWRPEAPTGPNATESVQPMEGQEDEGNGAQYRGILEASLE 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGIEAYLAVMVFALVLGWMNALYFTRGLKLTGTYSIMIQKILFKDLFRFLLVYLLFMIGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAIEWYLPLLVSALVLGWLNLLYYTRGFQHTGIYSVMIQKVILRDLLRFLLIYLVFLFGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LRLAGEVITLFTGVLFFFTNIKDLFMKKCPGVNSLFIDGSFQLLYFIYSVLVIVSAALYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MLLTGHILILLGGIYLLVGQLW-YFWRRHVFIWISFIDSYFEILFLFQALLTVVSQVLCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVEPINELLRDKWRKFGAVSFYINVVSYLCAMVIFTLTAYYQPL--EGTPPYPYRTTVDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RFFQ-KGQGTCFYFGELPLSLAACTKQWDVVSYLLENPHQPASLQATDSQGNTVLHALVM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RDRLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTGKTCLMKAVLNLKDGVNACI 135
                                                                                                                                                                                                                                                                                                                                                                                                               PTLCEDP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WKLQKAISVLEMENGY-WWCRKKQRAGVMLTVGTKPDGSPDERWCFRVEEVNWASWEQTL 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ASALVSLLNPCANMKVCNEDQTNCTVPTYPSCRDS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RFFQPKDEGGYFYFGELPLSLAACTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         {\tt RPILFDIVSRGSTADLDGLLPFLLTHKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PLSSLANLFEG-EDGSLSPSPADASRPAGPGDGRPNLRMKFQGAFRKGVPNPIDLLESTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PVFRLETLDGGQEDG----SEADRGK-LDFGSGLPPMESQFQGEDRKFAP---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ISDNSAENIALVTSMYDGLLQAGARLCPTVQLEDIRNLQDLTPLKLAAKEGKIEIFRHIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YESSVVPGPKKAPMDSLFDYGTYRHHSSDNKRWRKKITEKQPQSPKAPAPQPPPILKVFN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      339;
                                                                                                                                          RECEPTOR-RELATED
                                                                                                                                                             1 (TrEMBLrel.
1 (TrEMBLrel.
1 (TrEMBLrel.
                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                               725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------GTGASQPDP--NRFD
                                                                                                                                                             16,
16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    114;
                                                                                                                                          , Last sequence update)
, Last annotation update)
OSMOTICALLY ACTIVATED CHANNEL
                                                                                                                                                                                                            Created)
                                               Craniata; Vertebrata; I
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                         871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    246;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                         Euteleostomi;
                                                    Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88;
                                                    Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ė
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16;
```

B. Choe Y., Marti Renom M.A., Bell A.M., Denis C.S., plor-related osmotically activated channel (VR-OAC) betate osmoteceptor.*; 36.00). 36.200). 36.200). 36.200). 36.200). 36.200). 36.200). 36.200,)b 673 LFKLTIGMGD NY 660 WKLQKAISVL	LLTGHIL : : : : : AIEWYLP GIEAYLA GIEAYLA GIEAYLA SALVTLL SALVTLL	196 RFFQ-KGQ : 271 RFFQPKDE 255 ISDNSAEN : : : 331 IADNTREN 315 QREFSG : :: 391 RREVTDED 372 VLEPLNKL	2y 8 PVFRLETLDG 	RP SEQUENCE FROM TROUGHT TISSUE-KINNEY; RX PUDMed-1108163 RA Liedtke W.B., ROBIL 103.525-5 REMBL; AF263521 REMBL; AF263521 WW Receptor. RECEUTION MATCH Best Local Simila Matches 341; Co.
Denis C.S., annel (VR-OAC) annel (VR-OAC) Length 871; Length 871; Length 871; dels 119; Ga FAP	SAKY	· 🛱 🛱 · Ø 🕏 · P 🗗 🗗	YFGELPLSLAACTKOWDVSYLL	GQEDGSEADRGKLDFGSGLI :	.A. hoe Y., Marti-Renom M.A., th A.J., Friedman J.M., He ptor-related osmotically a brate osmoreceptor."; 5(2000). 5(2000). AAGZ8027.1; AA
7 7 7 7 6 6 5 6 5 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5	ETVGQVSKES VEEVNWASWE : : : : VDEVNWSHWN KEDEDGASEE	QALLTVVSQVLCF :: YSVLVVVSAALYL YSVLVVLFAGF : : : : RFLLTYLLFMIGY GAQYRGILEASLE : : ETFYASTELD ETVNSVATDSWSI	PHOPASLQATDSQGNTVLI 	EDRKFAP	ell A.M., Denis C.S., ler S.; tivated channel (VR-OAC C354B CRC64; DB 11; Length 871; e-107; 257; Indels 119; G

Qy 757 PVQLL 761 |: | Db 844 PLDNL 848

Search completed: July 18, 2001, 16:00:08 Job time: 136 sec

THIS PAGE BLANK (USPTO)